

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Zhu et al.)
)
Serial No.:) **Examiner:**
)
Filing Date:) **Art Unit:**
)
Title: MAGNETIC MEMORY ELEMENT AND MEMORY DEVICE INCLUDING SAME

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants, in accordance with their duty of disclosure pursuant to 37 C.F.R. § 1.56, hereby advise the United States Patent and Trademark Office of the references listed on the accompanying form PTO/SB/08. Copies of the non-US patent references are also enclosed.

Applicants note that although the cited references may be relevant to the examination of the above-referenced application, under 37 C.F.R. § 1.97(h), the filing of this *Information Disclosure Statement* "shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56(b)."

Respectfully submitted,

Date: 11/12/03


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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				<i>Complete if Known</i>			
				Application Number			
				Filing Date			
				First Named Inventor		Xiaochun Zhu	
				Art Unit			
Examiner Name							
Sheet	2	of	2	Attorney Docket Number	020628		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		Zhu et al., "A Vertical MRAM Free of Write Disturbance," IEEE Transactions on Magnetics, Vol. 39, No. 5, September 2003, Carnegie Mellon University, Pittsburgh, PA	
		Zhu et al., "Characteristics of AP Bias in Spin Valve Memory Elements, Jul. 1998, IEEE Transactions on Magnetics, Vol. 34, No. 4 pp. 1063-1065.	

Examiner Signature		Date Considered	
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PTO/SB/08A (10-01)

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				First Named Inventor		Xiaochun Zhu
				Art Unit		
Examiner Name						
Sheet	1	of	2	Attorney Docket Number	020628	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
		US 2003/0202375 A1		Oct. 30, 2003	Sharma et al.	
		US 2003/0183889 A1		Oct. 2, 2003	Kajiyama	
		US 2003/0174537 A1		Sep. 18, 2003	Bloomquist et al.	
		US 6,639,830 B1		Oct. 28, 2003	Heide	
		US 6,643,168 B2		Nov. 4, 2003	Okazawa	
		US 6,391,483 B1		May 21, 2002	Zhu et al.	
		US 5,343,422 A		8/1994	Kung et al.	
		5,475,304 A		12/1995	Prinz	
		5,477,482 A		12/1995	Prinz	
		5,541,868 A		7/1996	Prinz	
		5,640,343 A		6/1997	Gallagher et al.	
		5,661,062 A		8/1997	Prinz	
		5,729,410 A		3/1998	Fontana, Jr. et al.	
		5,734,605 A		3/1998	Zhu et al.	
		5,745,408 A		4/1998	Chen et al.	
		5,748,524		5/1998	Chen et al.	
		5,757,695 A		5/1998	Shi et al.	
		5,768,183 A		6/1998	Zhu et al.	
		5,774,394 A		6/1998	Chen et al.	
		5,793,697 A		8/1998	Scheuerlein	
		5,923,583 A		7/1999	Womack	
		5,969,978		10/1999	Prinz	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)					
		EP 0 681 338		11/1998			
		EP 0 910 092		4/1999			
		WO 98/15897		4/1998			
		WO 98/44481		10/1998			

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